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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,208	04/11/2001	Takahiro Yoshida	016886/0183	4216
22428	7590	07/19/2005	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			TIV, BACKHEAN	
			ART UNIT	PAPER NUMBER
			2151	

DATE MAILED: 07/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/807,208

Applicant(s)

YOSHIDA ET AL.

Examiner

Backhean Tiv

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 20-38 is/are pending in the application.  
4a) Of the above claim(s) 23-29 and 33-38 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 20-22 and 30-32 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

RD

***Detailed Action***

Claims 20-38 are pending in this application. Claims 1-19 have been cancelled.

This is a response to the amendment filed on 5/2/05.

***Election/Restrictions***

Restriction to one of the following inventions is required under 35 U.S.C 121:

- I. Claims 20-22,30-32 are drawn to separating devices based on input/output wavelength, classified in class 709, subclass 249.
- II. Claims 23,33, are drawn to recognizing devices based on test codes that is different from ordinary LAN code, classified in class 709, subclass 222.
- III. Claims 24,34, are drawn to recognizing devices based on alarm code that is different from ordinary LAN code, classified in class 709, subclass 250.
- IV. Claims 25,26,35,36 are drawn to recognizing devices based on code TYPE that is not existing in a protocol, classified in class 709, subclass 220.
- V. Claims 27,28,37,38 are drawn to recognizing devices based on the speed of the input/output, classified in class 709, subclass 248.
- VI. Claim 29 is drawn to recognizing devices based on the communication state and test state of the devices, classified in class 709, subclass 221.

Newly submitted claims 23-29 and 33-38 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are

shown to be separately usable. Invention II is drawn to recognizing devices based on test codes that is different from ordinary LAN code. Invention I is drawn to separating devices based on input/output wavelength. In this instant case invention I has separate utility such as determining which devices has the authority to can connect to a LAN, WAN, or any other network configuration based on the input/output wavelength of a particular device. See MPEP § 806.05(d).

Inventions I and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. Invention III is drawn to recognizing devices based on alarm code that is different from ordinary LAN code. Invention I is drawn to separating devices based on input/output wavelength. In this instant case invention I has separate utility such as determining which devices has the authority to can connect to a LAN, WAN, or any other network configuration based on the input/output wavelength of a particular device. See MPEP § 806.05(d).

Inventions I and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. Invention IV is drawn to recognizing devices based on code TYPE that is not existing in a protocol. Invention I is drawn to separating devices based on input/output wavelength. In this instant case invention I has separate utility such as determining which devices has the authority to can connect to a LAN, WAN, or any other network configuration based on the input/output wavelength of a particular device. See MPEP § 806.05(d).

Inventions I and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. Invention V is drawn to recognizing devices based on the speed of the input/output. Invention I is drawn to separating devices based on input/output wavelength. In this instant case invention I has separate utility such as determining which devices has the authority to can connect to a LAN, WAN, or any other network configuration based on the input/output wavelength of a particular device. See MPEP § 806.05(d).

Inventions I and VI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. Invention VI is drawn to recognizing devices based on the communication state and test state of the devices. Invention I is drawn to separating devices based on input/output wavelength. In this instant case invention I has separate utility such as determining which devices has the authority to can connect to a LAN, WAN, or any other network configuration based on the input/output wavelength of a particular device. See MPEP § 806.05(d).

Inventions II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. Invention III is drawn to recognizing devices based on alarm code that is different from ordinary LAN code. Invention II is drawn to recognizing devices based on test codes that is different from ordinary LAN code. In this instant case invention II has separate utility such as transferring data to or from another

computer with functional configuration of one of the computers within the network. See MPEP § 806.05(d).

Inventions II and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. Invention IV is drawn to recognizing devices based on code TYPE that is not existing in a protocol. Invention II is drawn to recognizing devices based on test codes that is different from ordinary LAN code. In this instant case invention II has separate utility such as transferring data to or from another computer with functional configuration of one of the computers within the network. See MPEP § 806.05(d).

Inventions II and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. Invention V is drawn to recognizing devices based on the speed of the input/output . Invention II is drawn to recognizing devices based on test codes that is different from ordinary LAN code. In this instant case invention II has separate utility such as transferring data to or from another computer with functional configuration of one of the computers within the network. See MPEP § 806.05(d).

Inventions II and VI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. Invention VI is drawn to recognizing devices based on the communication state and test state of the devices. Invention II is drawn to recognizing devices based on test codes that is different from ordinary LAN code. In

this instant case invention II has separate utility such as transferring data to or from another computer with functional configuration of one of the computers within the network. See MPEP § 806.05(d).

Inventions III and IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. Invention IV is drawn to recognizing devices based on code TYPE that is not existing in a protocol. Invention III is drawn to recognizing devices based on alarm code that is different from ordinary LAN code. In this instant case invention III has separate utility such as controlling the device to obtain results by transmission of a designated distinctive control signal over communication lines or channels. See MPEP § 806.05(d).

Inventions III and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. Invention V is drawn to recognizing devices based on the speed of the input/output. Invention III is drawn to recognizing devices based on alarm code that is different from ordinary LAN code. In this instant case invention III has separate utility such as controlling the device to obtain results by transmission of a designated distinctive control signal over communication lines or channels. See MPEP § 806.05(d).

Inventions III and VI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. Invention VI is drawn to recognizing devices based on

the communication state and test state of the devices. Invention III is drawn to recognizing devices based on alarm code that is different from ordinary LAN code. In this instant case invention III has separate utility such as controlling the device to obtain results by transmission of a designated distinctive control signal over communication lines or channels. See MPEP § 806.05(d).

Inventions IV and V are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. Invention V is drawn to recognizing devices based on the speed of the input/output. Invention IV drawn to recognizing devices based on code TYPE that is not existing in a protocol. In this instant case invention IV has separate utility such as processing operation involving data transfer between computers which exchange status data to determine the operating characteristics of one or more of the computer. See MPEP § 806.05(d).

Inventions IV and VI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. Invention VI is drawn to recognizing devices based on the communication state and test state of the devices. Invention IV drawn to recognizing devices based on code TYPE that is not existing in a protocol. In this instant case invention IV has separate utility such as processing operation involving data transfer between computers which exchange status data to determine the operating characteristics of one or more of the computer. See MPEP § 806.05(d).



Inventions V and VI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. Invention VI is drawn to recognizing devices based on the communication state and test state of the devices. Invention V drawn to recognizing devices based on the speed of the input/output. In this instant case invention V has separate utility such as matching the timing between computers. See MPEP § 806.05(d).

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 23-29,33-38 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 20-22,30-32 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 20-22,30-32 make use of an “optical collector” and “optical distributor”,

however this "optical collector" and "optical distributor" are not fully explained in the specification.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 20,21,30,31 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,502,131 issued to Vaid et al.(Valid) in view of US Patent 5,208,811 issued to Kashio et al.(Kashio).

As per claim 20,21,30,31 Valid teaches a system for performing a maintenance test between LAN connecting devices in which a plurality of LAN connecting devices that are connectable to a LAN configured(Fig.4) such that communication is possible between the LAN connecting devices using an optical signal of a first input / output wavelength for performing ordinary LAN communication and an optical signal of a second input / output wavelength for maintenance communication relating to communication on said circuit connecting the LAN connecting devices to each other(Abstract), wherein one of said LAN connecting devices comprises: an optical collector for collecting the optical signal of said first input / output wavelength and an optical signal of said second input / output wavelength and transmitting them to said circuit(Fig.11; col.6, lines 40-57, col.7, lines 7-25; teaches the use of Ethernet LAN,

Ethernet uses fiber optic); a first communication data control part for performing ordinary LAN communication processing and outputting the optical signal of the first input / output wavelength outputted by the LAN communication processing to said optical collector(Fig.11; col.6, lines 40-57, col.7, lines 7-25); and a first maintenance data control part for outputting a maintenance signal for performing maintenance test processing of communication to said optical collector as the optical signal of the second input / output wavelength(col.10, lines 50-67), and wherein the other of said LAN connecting devices comprises: an optical distributor for separating the optical signal transmitted by said circuit to said first input / output wavelength and said second input / output wavelength and outputting each of them(Fig.11); a second communication data control part for performing the ordinary LAN communication processing by the optical signal of the first input / output wavelength outputted by said optical distributor(Figs.1-19,col.6, lines 40-col.7, lines 67); and a second maintenance data control part for performing said maintenance test processing of communication by the optical signal of the second input / output wavelength outputted by said optical distributor, wherein the maintenance test is performed on a path between said LAN connecting devices (Figs.1-19,col.6, lines 40-col.7, lines 67); and a first maintenance data control part for performing failure monitoring processing and outputting alarm information obtained by the failure monitoring processing to said optical collector as the optical signal of the second input / output wavelength(Fig.9); wherein a maintenance test is performed for a connection path with said opposite party LAN connecting device(Figs.1-21).

Vaid however does not explicitly teach the use of OSI layer 2.

Kashio teaches the use of OSI layer 2 for LAN devices(Abstract).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Vaid to use OSI layer 2 for LAN devices as taught by Kashio in order to cod address and transmit information.

One ordinary skill in the art would have been motivated to combine the teachings of Vaid and Kashio in order to provide a system to transfer data from one LAN device to another LAN device.

Claims 22,32 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,502,131 issued to Vaid et al.(Valid) in view of US Patent 5,208,811 issued to Kashio et al.(Kashio) in further view of US Patent 6,591,368 issued to Ryu.

As per claim 22, 32, Vida teaches a system for performing a maintenance test between LAN connecting devices in which a plurality of LAN connecting devices(Fig.4) that are connectable to a LAN and that are capable of such that communication is possible between the LAN connecting devices using an optical signal of a first input / output wavelength for performing ordinary LAN communication and an optical signal of a second input / output wavelength for notifying a state of the LAN connecting device on said circuit connecting the LAN connecting devices to each other(Abstract, Figs.1-21), wherein one of said LAN connecting devices comprises: an optical collector for collecting the optical signal of said first input / output wavelength and an optical signal of said second input / output wavelength and transmitting them to said circuit(Fig.11; col.6, lines 40-57, col.7, lines 7-25; teaches the use of Ethernet LAN, Ethernet uses fiber

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optic); a first communication data control part for performing ordinary LAN communication processing and outputting the optical signal of the first input / output wavelength outputted by the ordinary LAN communication processing to said optical collector(Fig.11; col.6, lines 40-57, col.7, lines 7-25); an optical distributor for separating the optical signal transmitted by said circuit to said first input / output wavelength and said second input / output wavelength and outputting each of them(Figs.1-21, col.10, lines 50-67); a second communication data control part for performing the ordinary LAN communication processing by the optical signal of the first input / output wavelength outputted by said optical distributor(Figs.1-21, col.10, lines 50-67); wherein transmission of said power-off signal from one of said LAN connecting devices to the other of said LAN connecting devices is performed by the signal(Figs.1-21).

Vaid however does not explicitly teach the use of OSI layer 2.

Kashio teaches the use of OSI layer 2 for LAN devices(Abstract).

Therefore it would have been obvious to one ordinary skill in the art at the time of the invention to modify the teachings of Vaid to use OSI layer 2 for LAN devices as taught by Kashio in order to cod address and transmit information.

One ordinary skill in the art would have been motivated to combine the teachings of Vaid and Kashio in order to provide a system to transfer data from one LAN device to another LAN device.

Vaid in view of Kashio does not explicitly teach LAN connecting device, when it comes into a power-off state, delivering a signal indicating the power-off state to said

opposite party device of said status communication; maintenance data control part for recognizing the power-off of one of said LAN connecting devices.

Ryu teaches LAN connecting device, when it comes into a power-off state, delivering a signal indicating the power-off state to said opposite party device of said status communication; maintenance data control part for recognizing the power-off of one of said LAN connecting devices (Fig.1, col.5, lines 23-33).

Therefore it would have been obvious to one ordinary skilled in the art at the time of the invention to modify the teachings of Vaid in view of Kashio to include indicating that a device is in a power off state as taught by Ryu in order to check the state of device(Ryu, col.1, line 44-col.2, line 34).

One ordinary skilled in the art would have been motivated to combine Vaid, Kashio, and Ryu to provide a system to have to turn on/off for a device(Ryu, col.1, lines 18-21).

### ***Response to Arguments***

All previous rejections are withdrawn due to applicant's amendments and arguments. Applicant's arguments pertaining to the Priority and specification objections are persuasive.

Applicant's arguments with respect to claims 20-22,30-32 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Backhean Tiv whose telephone number is (571)272-3941. The examiner can normally be reached on 9 A.M.-12 P.M. and 1 -6 P.M. Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

***On July 15, 2005, the Central Facsimile (FAX) Number will  
change from 703-872-9306 to 571-273-8300***

  
Backhean Tiv  
2151  
7/16/05

  
ZARNI MAUNG  
SUPERVISORY PATENT EXAMINER